

TITLENEAR IR SENSITIVE PHOTOIMAGEABLE/PHOTOPOLYMERIZABLE
COMPOSITIONS, MEDIA, AND ASSOCIATED PROCESSESABSTRACT OF THE DISCLOSURE

5 Novel photopolymer compositions are disclosed which contain dyes that
absorb strongly in the near infrared (near IR) region of the electromagnetic
spectrum. These dyes are useful as photosensitizers for initiating a variety of
photoimaging and photopolymerization reactions. Imaging Media are disclosed
herein which are sensitive in the near infrared (near IR) region of the
10 electromagnetic spectrum and which can initiate polymerization of ethylenically
unsaturated monomer components in negative-acting photopolymer systems
and/or which can initiate conversion of a leuco dye to its corresponding colored
dye form. These imaging media comprise either a near IR dye photochemical
sensitizer, a hexaarylbiimidazole (HABI) photoinitiator, a chain transfer agent,
15 and a photopolymerizable material or a near IR dye photochemical sensitizer, a
hexaarylbiimidazole (HABI) photoinitiator, and a leuco dye. These imaging
media are useful in a variety of photopolymer products, including photoresists,
proofing films, and holographic recording films.

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JMS/dmm